



**STATE OF MONTANA
MONTANA DEPARTMENT OF TRANSPORTATION
JOB PROFILE AND EVALUATION**

SECTION I - Identification

Working Title:
District Bridge Inspection Manager

Department:
Transportation

Class Code Number:
131856

Division & Bureau:
Missoula District Engineering

Class Code Title:
Project Facilitation Specialist

Section & Unit:
Missoula District

Pay Band: 6

Work Address:
2701 Prospect Ave.
Helena, MT 59601

Position Number: 91958

Phone: 406-442-6001

☐ FLSA Exempt

☒ FLSA Non-Exempt

Profile Completed By:
Bridge Inspection Panel
Kent Barnes

Work Phone:
406-444-6260

Debby Williams
Human Resources Specialist

406-444-6945

Brian Cameron
CMS, LLC

406-442-4934

Work Unit Mission Statement or Functional Description:

The MDT's mission is to serve the public by providing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality and sensitivity to the environment.

Describe the Job's Overall Purpose:

The District Bridge Inspection Manager directs and oversees bridge inspection and analysis projects throughout the District. Duties include project planning and management; providing administrative and technical oversight, quality assurances, and engineering expertise; managing the ongoing operations and activities of the work unit; and performing a variety of other duties as assigned. The District Bridge Inspection Manager reports to the District Construction Engineer and directly supervises a variable number of permanent and seasonal staff.

SECTION II - Major Duties or Responsibilities

% of Time

A. INSPECTION PROJECT MANAGEMENT

65%

1. Plans and manages bridge inspection and analysis projects within the District to ensure the overall quality, efficiency, and cost-effectiveness of projects. Evaluates current and projected workflow, relative complexity of inspections (e.g., fracture critical, pin and hanger, snooper, emergency etc.), and available resources to determine priorities, staff/consultant assignments, and project specifications. Monitors projects to measure progress, resolve problems, and ensure timely delivery of major projects.
2. Develops and recommends new procedures, standards, and inspection alternatives to reflect changing project needs, standards, technologies, value engineering principles, and available human and equipment resources. This involves ongoing research and evaluation of new developments in structural engineering, collection methods and technologies, and changing project needs (e.g., safety, efficiency, cost-effectiveness, etc.) to recommend enhancements to the District's bridge inspection function.
3. Conducts and oversees bridge inspection activities to analyze bridge deficiencies and problems and facilitate the development of engineering solutions. Reviews the work of staff and consultants involved with bridge inspection and analysis projects to ensure the overall quality of work procedures and products as well as compliance with project specifications. This involves explaining and monitoring project needs, Department procedures and standards, and project requirements; reviewing work products and resolving technical or procedural problems; and reviewing and approving claims and payments based upon contract delivery.
4. Assesses and resolves complex project management problems, identifies and addresses project resource needs, and coordinates the exchange of accurate, current information among contractors, District and Department staff, local governments, members of the public, and others associated with inspection projects. Serves as the technical authority in the resolution of inspection-related problems. This includes evaluating problems related to inspection methods, compliance with standards, quality controls, and other issues; interpreting project requirements and applicable laws and regulations; negotiating among various parties to resolve disputes; and developing solutions to problems referred by subordinate staff, consultants, and project managers.
5. Develops analytical reports of inspection methods, findings, and recommendations to assess structural condition, examine structural deficiencies, prevent or mitigate adverse factors (e.g., fractures, scour, etc.), evaluate engineering alternatives, and implement corrective actions. This includes defending the technical integrity of inspection methods and results; negotiating optimum solutions (i.e., balancing safety, cost, resource requirements, etc.); and coordinating with MDT managers, local/county officials, and others to implement corrective actions.
6. Provides ongoing quality controls for inspection methods, procedures, and results to develop new approaches to various design needs and impediments, resolve process deficiencies (e.g., communication, technologies, etc.), and recommend procedures and standards that promote quality, efficiency, and cost-effectiveness. Develops quality control systems consistent with State and federal standards and requirements. This includes coordinating with other Districts' Bridge Inspection Managers, centralized staff and managers, local/county officials, FHWA representatives, private consultants, and others to develop and maintain uniform standards, resolve common problems, and optimize resources.

7. Provides advanced technical assistance, serving on various research and planning workgroups, and responding to complex issues referred by other Districts, Bureaus, and consultants on various aspects of bridge inspection and analysis. This includes research, analysis, and recommendations related to design, environmental considerations, upgraded safety features, special paving, foundation integrity, interpreting test results, use of specialized materials and equipment, and design alternatives and solutions.
8. Coordinates with centralized staff, other Districts, and MDT managers to evaluate new bridge inspection methods and technologies, operational efficiencies, cost-saving measures, safety measures, and other enhancements. Researches information and data related to new developments in structural inspection and analysis, assesses developmental methods proposed by other staff and managers, and implements appropriate operational and resource enhancements. Evaluates changing trends and technologies; identifies new standards for equipment and employees; and determines how to incorporate new technologies, procedures, regulations, and other issues into District operations.
9. Represents the District at public meetings, professional conferences and workgroups, formal hearings, legal proceedings, and other events to explain, promote, and defend District positions, actions, and interests on various issues (e.g., safety concerns, closures, cost-sharing opportunities, etc.). Responds to emergency assistance requests, complaints, technical questions, and other contacts by local/county officials, District staff, and members of the public.

B. DISTRICT PROGRAM OPERATIONS

20%

1. Monitors compliance with established operational policies and procedures and achievement of goals through consultation and meetings with subordinate staff and supervisors (e.g., weekly meetings, status reports, etc.); personal review of project plans, procedures, and results; and through discussions with other District and Department staff and management. Monitors compliance with established policies in programs and reviews and approves atypical or developmental methods and procedures.
2. Provides information for the preparation of biennial budgets. This involves forecasting annual expenditures based on factors such as historical expenses, proposed initiatives and ongoing activities, types of planned projects, inflation, changes in technologies and inspection project needs, and other factors. Develops recommendations for allocations for annual fiscal operational plans and recommends spending priorities by reviewing past funding practices, anticipated projects and expenditures, District goals and objectives, and related personnel and other administrative expenses.
3. Allocates human, material, and financial resources among various inspection projects to maximize the quality and efficiency of District bridge inspections. Prepares project budget proposals and amendments for the Engineering Services Supervisor to obtain authority and resources necessary for program operations and activities.
4. Coordinates contract negotiations and monitoring to ensure effective contract performance and compliance with specific terms and conditions of individual agreements. Ensures that the scope of contracts reflects appropriate intent and use of funds. Recommends approval, denial, or modifications of inspection-related contract components to ensure that agreements reflect the best interests of the Department and provide sufficient detail for effective monitoring and performance assessment.
5. Determines and fulfills supply, equipment, and vehicle procurement needs of the District Bridge Inspection Program, including responsibility for developing specifications, ensuring compliance

with Department procurement practices, developing budget justifications and submitting requests, and integrating equipment into District practices to ensure maximization of resources.

6. Ensures adherence to Department, state, and federal safety standards and procedures to protect project staff, materials, and the public from hazards associated with bridge inspection and analysis. This involves coordination with District supervisors, inspectors, maintenance personnel, and others to inform staff and contractors of changing safety protocols, limitations and capabilities of inspection equipment, site-specific characteristics, unusual or modified procedures, and other issues that affect the safety of project staff and the traveling public.

C. SUPERVISION

10%

1. Supervises a variable number of permanent and seasonal bridge inspection personnel (avg. 2.5 FTE) involved with ongoing bridge inspections, analyses, and reporting by reviewing and revising overall work plans, priorities, and procedures and monitoring progress through meetings and consultations. Conducts staff meetings, disseminates data, and promotes information exchange for support and advancement of District and Department goals.
2. Develops and recommends overall responsibilities of subordinate staff. Recommends and justifies requests for additional personnel as necessary.
3. Determines and fulfills training needs of subordinate staff and provides ongoing guidance and technical assistance as necessary.
4. Establishes objective, measurable, and observable performance standards for subordinate positions. Monitors and manages the performance of positions directly supervised and completes performance appraisals. Implements and monitors corrective actions, including disciplinary measures. Ensures staff compliance with State and agency personnel rules, regulations, and policies.
5. Performs a variety of other supervisory responsibilities, including signing time slips and approving leave requests, maintaining filing systems, ensuring the effective distribution of reports and documentation, and other tasks necessary to ensure the effective administration and operation of project responsibilities.

D. OTHER DUTIES

05%

This position performs a variety of other duties as assigned by the District Engineering Services Supervisor in support of the Department mission and Division objectives. This includes exchanging information with consultants, agency staff, and the public; providing training, education, and professional and technical assistance; directing special projects; participating in ongoing training and educational programs; and performing a variety of other duties as directed.

2. *Specific examples of problems solved, decisions made, or procedures followed when performing the most frequent duties of this position include:*

The incumbent is responsible for determining optimum inspection methods, equipment, workforce requirements, and project parameters (e.g., safety protocols, quality assurances, etc.) based upon different inspection types, structures, locations, and other factors. The position analyzes test results, engineering standards, and complex site-

specific characteristics (e.g., structural design, materials, environmental impacts, etc.) to ensure the quality and defensibility of inspection methods, procedures, and results. The position is also responsible for analyzing engineering data to assess overall structural condition, risks, and corrective actions and alternatives.

3. *The most complicated aspect of this position is:*

The most complex aspect of the position involves analysis and evaluation of project plans, engineering standards, District objectives, available resources, and other factors to effectively plan and administer major bridge inspection projects. As the District's technical authority in bridge inspections, the position is expected to evaluate and recommend solutions to complex and sometimes unprecedented problems.

4. *Guidelines, manuals, or written procedures that support this position include:*

Laws, regulations, guidelines, manuals or other written established procedures available to the incumbent include design and construction specifications, the Montana Bridge Inspection Manual, Engineering Division policies and practices, State and federal standards, American Association of State Highway Transportation Officials (AASHTO), Standard Montana Specifications for Road and Bridge Construction, and manuals for the various bureaus and units of the Division (e.g., Materials, Construction, Right of Way, Bridge, Preconstruction, etc.). AASHTO Specifications, Bridge Design Manual, and industry standards are used for general guidance. The position may refer to technical specifications and operations manuals related to specialized inspection tools, equipment, and vehicles.

5. *Which of the duties and/or specific tasks listed under 1. (above) are considered "essential functions" that must be performed by this position (with or without accommodations)? (If you need information or training on the identification of essential functions, please contact MDT Human Resources Division.)*

The following duties are considered essential functions because they require specialized expertise and skill and are the primary reasons the job exists:

Duty A: Inspection Project Management

Duty B: District Operations

Duty C: Supervision

The following mental and physical demands are associated with these essential functions:

PHYSICAL

- Lifting objects weighing up to 50 lbs.
- Ability to walk over uneven terrain or in water, climb structures spanning significant heights (i.e., 100+ feet), and effectively utilize safety equipment (e.g., ropes, hardhats, etc.)
- Extensive travel within the state to project locations (over 1,000 miles per month), and out of state travel by airline to national conferences and meetings.
- Operating a personal computer
- Communicate in writing, in person, and over the phone

MENTAL

- Deal with the public on a regular basis
- Ability to multi-task
- Demands for accuracy in all aspects of work
- Ability to meet inflexible deadlines
- Decision making that affects public health and safety
- Computing arithmetic operations

- Comparing data
- Compiling information
- Analyzing
- Coordinating
- Synthesizing
- Instructing

Predominant work is performed in the office and in the field, involving:

- Exposure to heavy vehicles and equipment
- Exposure to extreme heights
- Exposure to high speed traffic
- Exposure to dynamic weather conditions

6. **Does this position supervise others?** ☒ Yes ☐ No

Number directly supervised: 2.5

Complexity level of the positions supervised: 6, 5, 5

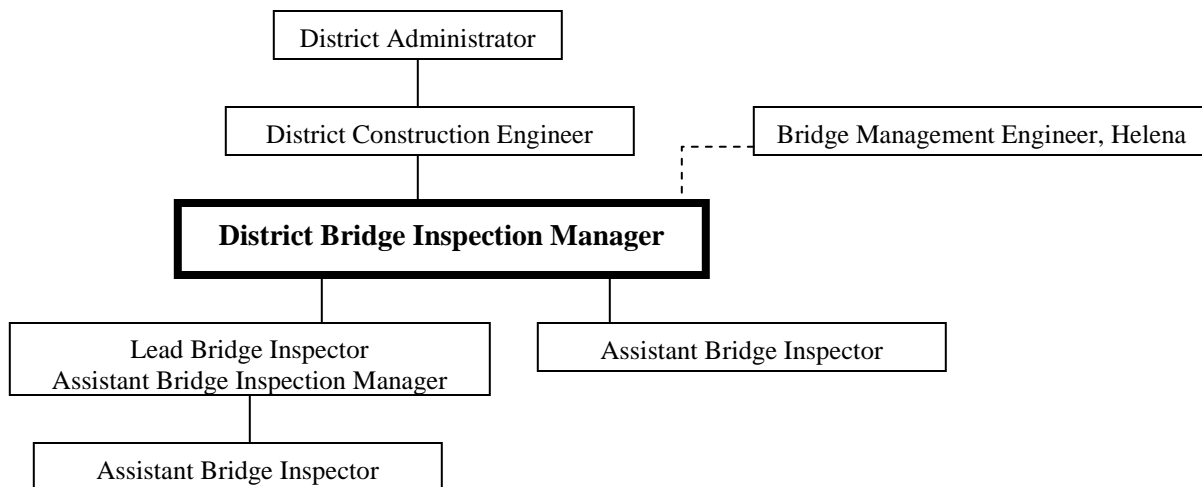
Position Number(s) of those supervised:

The District Bridge Inspection operation is being reorganized. The Assistant Bridge Inspection manager position is NYC and the position number has not been determined. The Assistant Manager will be a full time position with the same technical requirements as this position. The Assistant Inspectors will be training positions that will vary through the year.

7. **This position is responsible for:**

- | | | | |
|--|-------------------------------------|---|------------------------------------|
| <input type="checkbox"/> Hiring | <input type="checkbox"/> Firing | <input checked="" type="checkbox"/> Supervision | <input type="checkbox"/> Pay Level |
| <input checked="" type="checkbox"/> Performance Management | <input type="checkbox"/> Promotions | <input checked="" type="checkbox"/> Discipline | |
| <input type="checkbox"/> Other: | | | |

8. **Attach an Organizational Chart.**



SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

KNOWLEDGE:

This position requires extensive knowledge of the principles and practices of structural inspection, testing, and analysis; non-destructive testing techniques; structural engineering principles; project development and management methods; methods and techniques of highway construction; extensive knowledge of various site-specific characteristics and their potential effects on structural condition (e.g., temperature, weather conditions, scour, etc.); safety practices OSHA regulations; and contract administration. Supervisory responsibilities require knowledge of Department and State personnel procedures and policies, employment law, and personnel management practices and techniques.

SKILLS:

This position requires skill in directing, organizing, and coordinating multiple staff and projects, complex inspection and analysis procedures, and a variety of equipment; adapting inspection methods and techniques to meet various site-specific circumstances; and operating of a variety of inspection tools, equipment, and vehicles. Effective written and verbal communication skills are also required in communicating technical information and project plans with inspectors, contractors, and Department staff; developing technical reports and recommendations; and directing and coordinating a variety of training activities. This position further requires skill in the use of standard office software applications (i.e., word processing, spreadsheet, scheduling, etc.).

Behaviors required to perform these duties?

- **Leadership:** Provides clear directions, technical assistance, and guidance to inspection crews to ensure effective operations and project activities. Motivates staff to achieve common objectives. Appropriately delegates responsibilities to competent staff.
- **Analytical/Interpretive Thinking:** Accurately applies general engineering standards and project requirements to specific inspection and analyses.
- **Decision Making:** Evaluates multiple and ambiguous factors to resolve problems. Develops technically and legally defensible courses of action in response to structural deficiencies.
- **Communication:** Translates technical information to audiences of varied technical levels; communicates effectively with multiple staff, contractors, and cooperators verbally and in writing.
- **Independence of Action:** Determines appropriate responses to structural engineering deficiencies and project management problems with minimal assistance or precedent.

Education:

Check the one box indicating minimum education requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No education required | <input type="checkbox"/> Related AAS/2-years college/vocational training |
| <input type="checkbox"/> High school diploma or equivalent | <input checked="" type="checkbox"/> Related Bachelor's Degree |
| <input type="checkbox"/> 1-year related college/voc. training | <input type="checkbox"/> Related Master's degree |

Please specify the acceptable and related fields of study:

Required/Acceptable: Civil Engineering, Construction Technology

Related: Engineering discipline that qualifies for registration as a Professional Engineer (PE).

Other education, training, certification, or licensing required (specify): The position must successfully complete an approved Bridge Inspection Team Leader Certification program.

Experience:

Check the one box indicating minimum work-related experience requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No prior experience required | <input checked="" type="checkbox"/> 3 to 4 years |
| <input type="checkbox"/> 1 to 2 years | <input type="checkbox"/> 5 or more years |

Other specific experience (optional): Experience must include one (1) year of bridge inspection experience for candidates with a PE. Experience must include one (1) year of professional-level engineering supervisory experience.

Alternative Qualifications:

This agency will accept alternative methods of obtaining necessary qualifications.

☒ Yes ☐ No

Alternative qualifications include: Candidates certified as a Bridge Inspection Team Leader in accordance with federal and MDT requirements will be considered as qualified for this position. Graduates of the MDT Management Course will receive credit for the required one year of supervisory experience.

SECTION IV – Other Important Job Information

None specified

SECTION V – Signatures

Signature indicates this statement is accurate and complete.

Employee:

Name: _____ Title: _____

Signature: _____ Date: _____

Immediate Supervisor:

Name: _____ Title: _____

Signature: _____ Date: _____

Division/District Administrator:

Name: _____ Title: _____

Signature: _____ Date: _____

Department Designee:

Name: Jean Bond Title: Chief, Employee Relations Bureau

Signature: _____ Date: _____

Recruitment Review: My signature below attests to my review of and determination that the minimum qualifications (education and experience) listed in this profile meet the established recruitment standards of MDT.

Name: _____ Title: Human Resource Specialist (Helena/District)

Signature: _____ Date: _____